

**Work Order ID 110761****\*110761\***

Page 1

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Item ID:	D3393-041	Accept	<b>*N900040100*</b>	Setup	Start	<b>*NS1*</b>		
Revision ID:						Stop	<b>*NS2*</b>	
Item Name:	Battery Lock							
Start Date:	1/07/14	Start Qty:	1.00	<b>*1*</b>	Cust Item ID:			
Required Date:	1/07/14	Req'd Qty:	1.00	<b>*1*</b>	Customer:			
<b>Reference:</b>								
Approvals:	Process Plan: <u>MLS</u>	Date: <u>14-01-08</u>	Tooling:	Date: _____		Run	Start	<b>*NR1*</b>
	QC: _____	Date: _____	SPC (Y/N):	Date: _____		Stop		<b>*NR2*</b>

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr	Small Fab	Memo	0.00	FF	1	14-05-20
D3393	Rev A		ATTN: - CHECK IF KEYED ALIKE OR KEYED DIFFERENT 1-Open D3373-1 lock package. Keep keys, lock body, lock body nut, flat cam and lock barrel. Discard the rest.2-Using the flat cam, fabricate D3369-5 as per Dwg D3369 Identify as D3369-53-Assemble D3393-041 as per Dwg D3393. Insert lock body and fasten				

100	Large Fab	0.00	①	14-05-21	PJ
<b>*100*</b>	Small Fab	0.00			
Small Fab	Memo				

ATTN: - CHECK IF KEYED ALIKE OR KEYED DIFFERENT  
1-Open D3373-1 lock package. Keep keys, lock body, lock body nut, flat cam and lock barrel. Discard the rest.2-Using the flat cam, fabricate D3369-5 as per Dwg D3369 Identify as D3369-53-Assemble D3393-041 as per Dwg D3393. Insert lock body and fasten

110	Large Fab	0.00	①	14-05-21	PJ
<b>*110*</b>	Small Fab	0.00			
Small Fab	Memo				

Tack Weld lock shaft to flat cam of a Max 1/8" Long QtyPart Number  
Description Batch A/RN/A SS Rod M123823

DOA:

Date:



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only 

Work Order:	<b>DISPOSITION</b>			<b>AGAINST DEPARTMENT/PROCESS</b>														
Part No.	Rework	Scrap	Use-as-is	Skid-tube	Crosstube	Water Jet	Engineering											
NCR No.	Suspected Unapproved			Machining	Small Fab	Prod. Eng. Coor.	Quality											
				Thermoforming	Finishing	Rec/Store/Packaging	Other											
				Large Fab	Composite	Supplier												
Root Cause	Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector								
Design																		
Doc/Data																		
Equip/Tooling																		
Handling/Pre																		
Material																		
Operator																		
Offset/Setup																		
Process																		
Supplier																		
Training																		
Transport																		
Unapproved																		
<b>FAULT CATEGORY</b>																		
Landing Gear				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube							<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence			<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge			<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

**Work Order ID 110761****\*110761\***

Page 2

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Item ID: D3393-041

Accept

**\*N900040100\***

Setup

Start \*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Battery Lock

Start Date: 1/07/14 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 1/07/14 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
Number

14521

DAS  
24  
9-89

120

QC9- Inspect visual per QSI004- Fusion Welds

0.00

**\*120\***

QC

Quality Control

130

Small Fab

0.00

DAS

**\*130\***

Small Fab

Memo

0.00

30

Small Fab

Apply Crazy Glue to cap and press into Body 9567K21  
Batch: 11020743

9-89

140

QC5- Inspect part completeness to step on W/O

0.00

DAS

**\*140\***

QC

Quality Control

Memo

0.00

38

9-89

14-9-10

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	<b>DISPOSITION</b> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube	<b>General</b> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function <input type="checkbox"/>				Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/>				Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/>  <hr/> <hr/> <hr/>	

**Work Order ID 110761****\*110761\***

Page 3

January-07-14 3:02:49 PM

Item ID: D3393-041

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Battery Lock

Stop

**\*NS2\***

Start Date: 1/07/14 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 1/07/14 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
Description

150

Identify as per dwg &amp; Stock Location

**\*150\***

Packaging

Packaging

160

**\*160\***

QC

Quality Control

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

0.00

0.00

0.00

0.00

IX

14-9-11 SP

14/9/11 JG

MLJ 14-09-11

QC21- Final Inspection - Work Order Release

Memo

0.00

Quality Control

DQA:

Date:



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only 

Work Order: \_\_\_\_\_  
 Part No. \_\_\_\_\_  
 NCR No. \_\_\_\_\_

**DISPOSITION**

Rework   
 Scrap   
 Use-as-is   
 Suspected Unapproved

**AGAINST DEPARTMENT/PROCESS**

Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Folio/Program	Outside Dimensions	Pressure/Forced
Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>		
Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Off-set <input type="checkbox"/>		
Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		
Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>			

# Picklist Print

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Page 1

Work Order ID:	110761	Start Date:	1/07/14	Required Date:	1/07/14								
Parent Item:	D3393-041												
Parent Item Name:	Battery Lock		Start Qty: 1.00		Required Qty: 1.00								
Comments:	IPP Rev:A	New Issue	05-11-22	JLM									
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
5/16WC Washer		Purchased	No	127961		100	Each	0.0000	2	2	FF	14-05-20	
9567K21 Polyethelene Cap		Purchased	No			100	Each	15.0000	2	2	FF	14-05-20	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST381	M129254	15							
					120743	15							
D3373-1 Cam Lock		Manufactured	No			100	Each	32.0000	1	1	FF	14-05-20	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		26							
					105986	26							
				ST040		6							
					74862	6							
D3393-1 Battery Lock Casing		Manufactured	No			100	Each	4.0000	1	1	FF	14-05-20	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST492		4							
					102336	4							
D3393-3 Cam Lock Shaft		Manufactured	No			140	Each	23.0000	1	1	FF	14-05-20	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST041		23							
					101110	1							
					108529	10							
					109126	12							

DQA:

Date:



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only 

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	<b>DISPOSITION</b> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

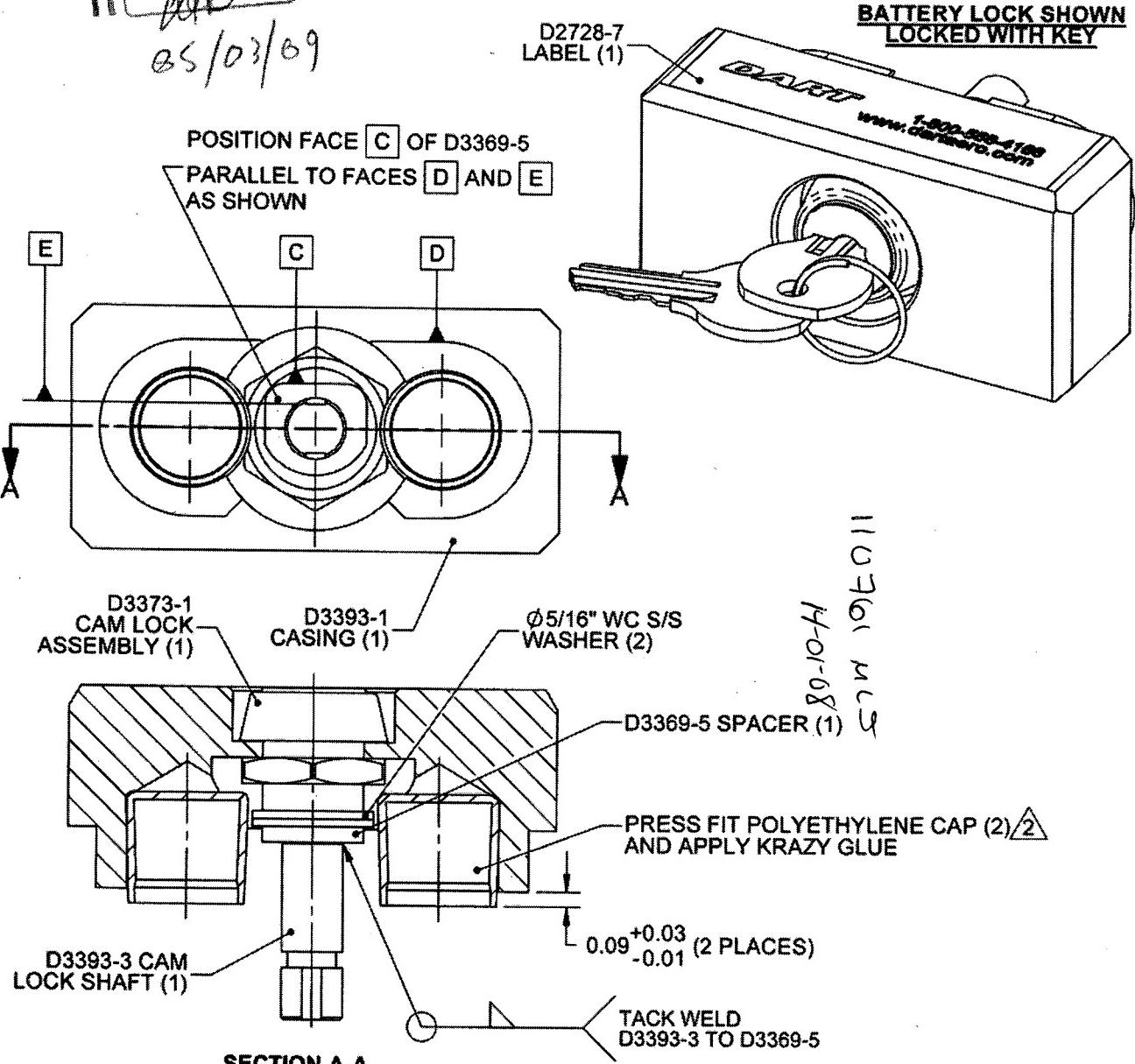
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
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**DART**

DESIGN <i>b3</i>	DRAWN BY <i>b3</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>b3</i>	APPROVED <i>ANS</i>	DRAWING NO. D3393	REV. A SHEET 1 OF 3
DATE 05.02.08		TITLE BATTERY LOCK	SCALE 1:1
A	05.02.08	NEW ISSUE	

**RELEASED**

BS/03/09

**D3393-041 BATTERY LOCK ASSEMBLY****NOTES:**

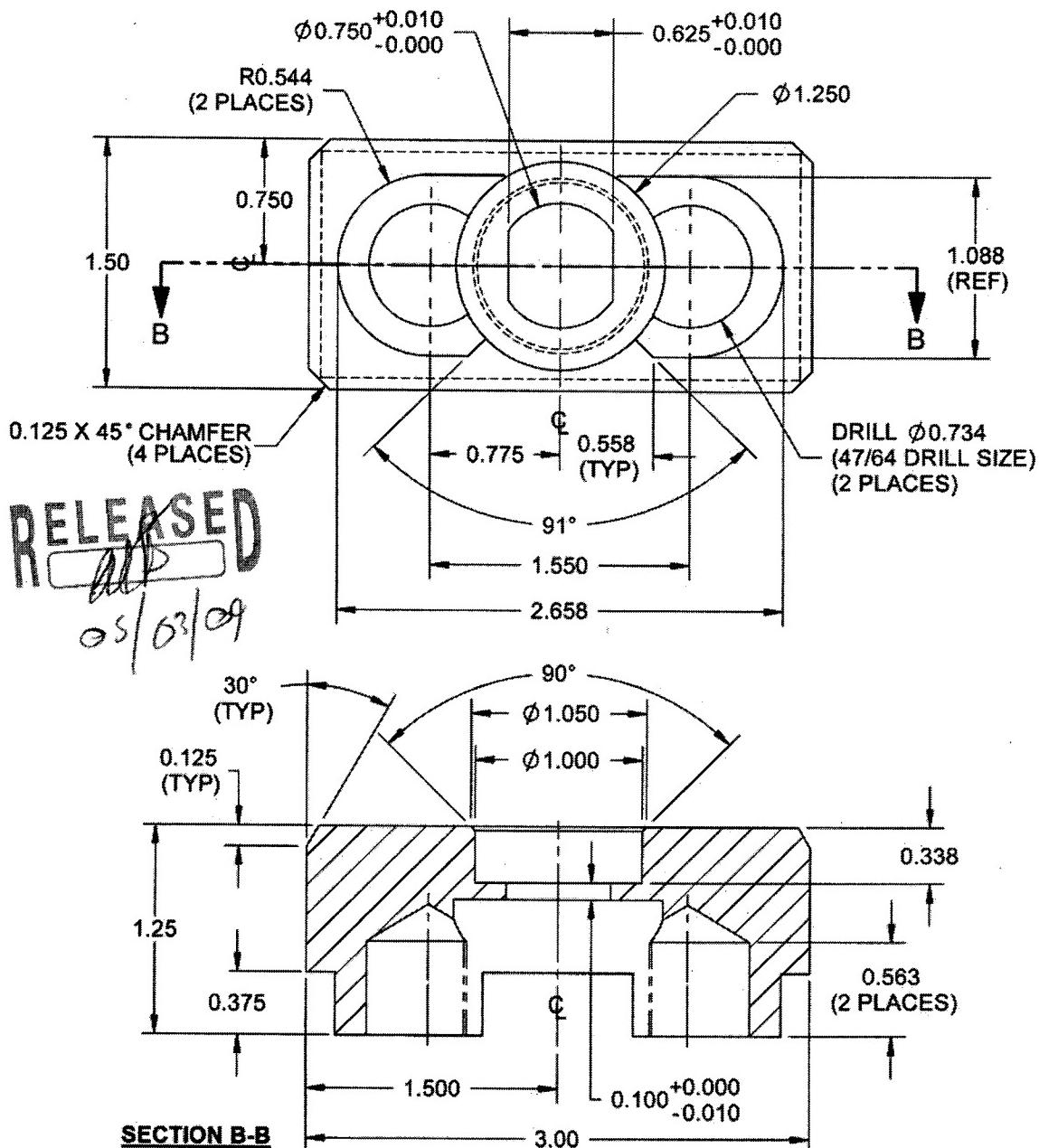
- 1) WELD PER DART QSI 004
- 2) POSSIBLE SUPPLIER: McMaster-Carr, P/N 9567K21

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**DART**

DESIGN 13	DRAWN BY 13	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED FF	APPROVED MM	DRAWING NO. D3393	REV. A SHEET 2 OF 3
DATE 05.02.09	TITLE BATTERY LOCK	SCALE 1:1	

**D3393-1 CASING****NOTES:**

- 1) MATERIAL: 6061-T6/T651 (QQ-A-200/8 OR QQ-A-225/8)  
(REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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**DART**

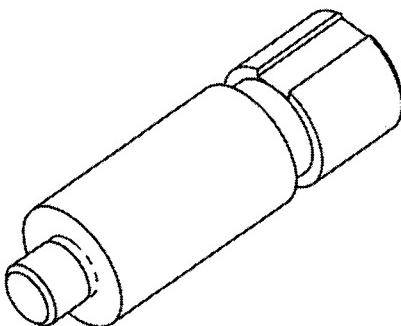
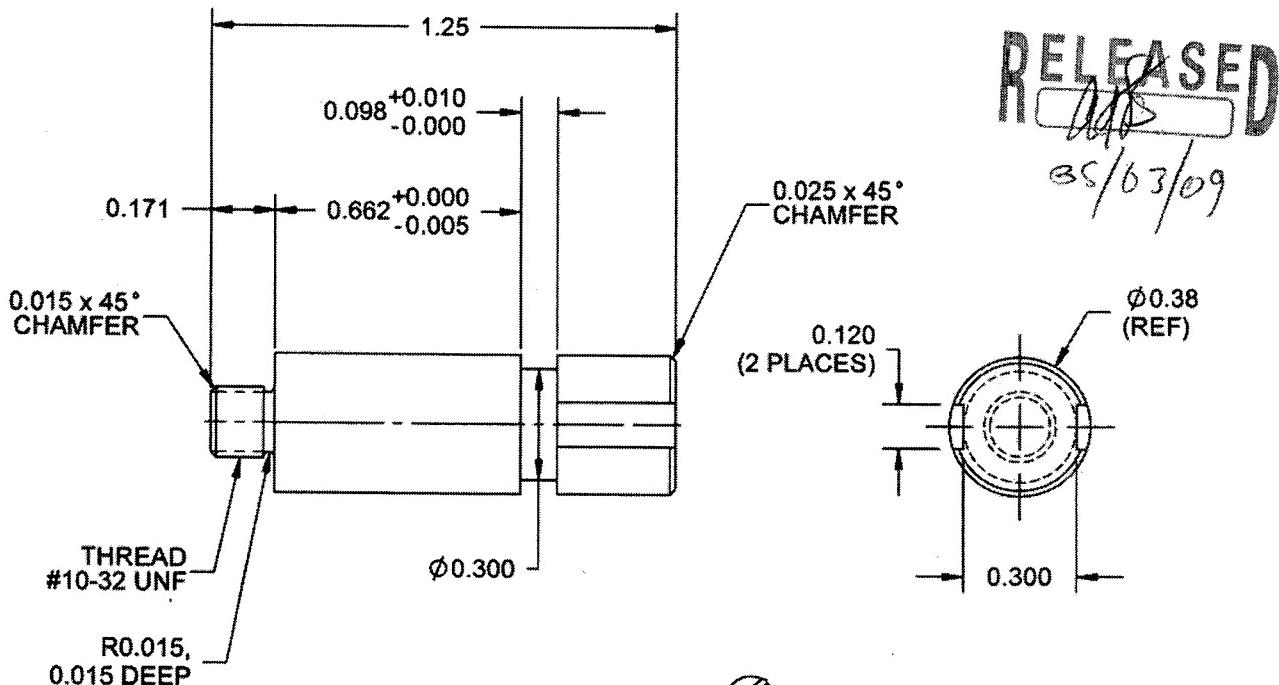
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. A
		D3393	SHEET 3 OF 3

DATE

05.02.09

TITLE

BATTERY LOCK

SCALE  
2:1**D3393-3 CAM LOCK SHAFT****NOTES:**

- 1) MATERIAL: AISI 303 S.S. (REF. DART SPEC. M303R0.375)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010